

## **REMARKS**

The present Amendment cancels claims 1-18 and adds new claims 19-26. Therefore, the present application has pending claims 19-26.

Claims 1-18 stand rejected under 35 USC §102(b) as being anticipated by Mohan (U.S. Patent No. 5,280,611). As indicated above, claims 1-18 were canceled. Therefore, this rejection is rendered moot. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

As indicated above, the present Amendment adds new claims 19-26. New claims 19-26 are directed to a method and system for updating for primary and secondary log blocks stored in primary and secondary disk subsystems of primary and secondary database processing systems respectively in order to be ready for disaster recovery at the occurrence of a failure in the primary database processing system.

According to the present invention, the primary disk subsystem receives a write command from a primary host computer via a network, writes data indicated by the write command into a cache of the primary disk subsystem, determines whether the received write command is a command to write data into the primary log block, transfers the received write command to the secondary disk subsystem via the network, if the received write command is a command to write data into the primary log block, traces log records constituting the primary log block stored in the primary disk subsystem to update data of a primary database in the primary disk subsystem and reports completion of write operation of the data indicated by the received write command to the primary host computer via the network.

Further, according to the present invention the secondary disk subsystem receives the write command transferred from the primary disk subsystem via the network, writes the data indicated by the write command thus transferred into a cache of the secondary disk subsystem, determines whether the transferred write command is a command to write data into the secondary log block and traces log records constituting the secondary log block stored in the secondary disk subsystem to update data of a secondary disk subsystem when the transferred write command is a command to write the data into the secondary log block.

The features of the present invention as described above are directed to a disaster recovery system. As seen from Fig. 1 of the present application, the present invention includes a primary database processing system and a secondary or standby database processing system. The primary database processing system includes a primary host computer 1 and a primary disk subsystem 2, and the standby database processing system includes a standby host computer 3 and a standby disk subsystem 4. It is noted that the standby host computer 3 is not operating in a standby state.

As seen from the flowchart of Fig. 5 of the present application, when receiving a write command from the primary host computer, the primary disk subsystem determines whether the received write command is a command to write data into the primary log block in the primary disk subsystem. If so, then the contents of the primary log block have been modified or updated. Thus, the primary log block is updated. Then, the primary disk subsystem also updates the primary database of the primary disk subsystem according to the updated primary log block, while transferring the received write command to

the standby disk subsystem to reflect the received write command also on the standby log block.

As seen from the flowchart of Fig. 8 of the present application, when receiving the write command transferred from the primary disk subsystem, the standby disk subsystem updates the standby log block and then updates the standby database of the standby disk subsystem according to the updated secondary log block.

Accordingly, in the present invention when a failure occurs in the primary database processing system, the standby host computer can perform disaster recovery by utilizing the updated standby log block held in the standby disk subsystem.

The above described features of the present invention now more clearly recited in the claims are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, the above described features of the present invention now more clearly recited in the claims are not taught or suggested by Mohan.

Mohan is directed to a method for efficiently recovering data from a failure of a shared store (SS) in a multi-computer data sharing system. Mohan utilizes the transaction log data to recover the database from the failure of the shared store. However, Mohan fails to teach or suggest the features and functions of the primary log block, the active database processing system, the secondary log block and secondary or standby database processing systems of the present invention as recited in the claims.

Mohan also fails to teach or suggest that the write command transferred from the primary host computer to write data into the primary log

block is utilized also to update the secondary log block and the secondary database as in the present invention as recited in the claims.

Therefore, Mohan fails to teach or suggest the features of the present invention as now more clearly recited in the claims. Accordingly, Mohan does not anticipate or render obvious the features of the present invention as recited in the claims.

In view of the foregoing amendments and remarks, applicants submit that claims 19-26 are in condition for allowance. Accordingly, early allowance of claims 19-26 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (500.42993X00).

Respectfully submitted,

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